

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the captioned patent application:

Listing of Claims:

1-29. (Cancelled)

30. (New) An apparatus for testing components of a medical device comprising a cable detachably coupled to a transmitter coil, the testing apparatus comprising:

a plurality of cable testing stations each configured to electrically connect to an end of the cable;

a coil testing station configured to inductively connect to the transmitter coil; and

a testing circuit configured to drive the transmitter coil via a first cable testing station to concurrently test the cable and the transmitter coil when the cable is connected to the first cable testing station, and to test the cable independent of the transmitter coil when opposing ends of the cable are connected to cable testing stations.

31. (New) The testing apparatus of claim 30, wherein the plurality of cable testing stations comprise a first cable testing station configured to be electrically connected to a first type of cable end, and a second cable testing station configured to be electrically connected to a second type of cable end.

32. (New) The testing apparatus of claim 31, wherein the first cable testing station comprises a socket configured to receive a plug of one of said two or more types of cables.

33. (New) The testing apparatus of claim 30, wherein the coil testing station comprises a planar area configured to receive the transmitter coil.

34. (New) The testing apparatus of claim 30, wherein the coil testing station comprises a receiver coil configured to be inductively coupled to the transmitter coil.

35. (New) The testing apparatus of claim 34, wherein the planar area has an indicator disposed thereon that provides an indication of where the transmitter coil should be positioned for coupling to the receiver coil.

36. (New) The testing apparatus of claim 35, wherein the indicator is a pictorial representation of the transmitter coil.

37. (New) The testing apparatus of claim 30, wherein a magnet is disposed adjacent the transmitter coil, and wherein the coil testing station comprises a magnet configured to provide magnetic alignment with magnet disposed adjacent the transmitter.

38. (New) The testing apparatus of claim 30, further configured to sense the type of the cable when the cable is electrically connected to the testing apparatus, and configured to access stored data for the sensed cable type from a memory component.

39. (New) The testing apparatus of claim 30, wherein the testing circuit further comprises a control circuit configured to control the operations of the testing apparatus.

40. (New) The testing apparatus of claim 39, wherein the control circuit is a microcontroller.

41. (New) The testing apparatus of claim 30, wherein the testing circuit further comprises a memory component.

42. (New) The testing apparatus of claim 40, wherein the microcontroller comprises a microprocessor having an analog to digital converter (ADC) configured to digitize a voltage in the cable when the at least one testing circuit tests the cable.

43. (New) The testing apparatus of claim 30, further comprising an output component for outputting a result of the tests.

44. (New) The testing apparatus of claim 43, wherein said output component comprises a light.

45. (New) The testing apparatus of claim 44, wherein the light is a light emitting diode (LED).

46. (New) The testing apparatus of claim 30, wherein the medical device is a cochlear implant system.

47. (New) The testing apparatus of claim 33, wherein the testing apparatus is configured to sense the type of the transmitter coil when the coil is disposed on the planar area.

48. (New) The testing apparatus of claim 47, wherein the testing circuit is further configured to access from a memory component of the appropriate stored data for the sensed coil type.

49. (New) The testing apparatus of claim 34, wherein the testing circuit is configured to induce a voltage in the receive coil, and to determine whether a smoothed voltage corresponding to the induced voltage falls within a design specification range for the transmitter coil.

50. (New) A method of testing components of a medical device comprising a cable detachably coupled to a transmitter coil with a testing apparatus comprising a plurality of cable testing stations each configured to electrically connect to an end of the cable, and a coil testing station configured to inductively connect to the transmitter coil, the method comprising:

driving, with a testing circuit, the cable and transmitter coil via a first cable testing station so as to induce a voltage in a receiver coil of the apparatus to concurrently test the cable and the transmitter coil; and

driving, with the testing circuit, a test signal through the cable independent of the transmitter coil when opposing ends of the cable are connected to cable testing stations.

51. (New) The method of claim 50, further comprising:

measuring a response of one or more of the cable and the transmitter coil to the test signal;

evaluating the measured response of the one or more cable and transmitter coil.

52. (New) The method of claim 50, further comprising:

rectifying and smoothing the voltage induced in the receiver coil; and

determining whether the rectified and smoothed voltage falls within a design specification range for the transmitter coil.

53. (New) The method of claim 47, further comprising:

sensing the type of the cable; and

sensing the type of the transmitter coil.

54. (New) The method of claim 50, wherein the coil testing station and the transmitter coil each comprise magnets, and wherein the method further comprises:

magnetically coupling the transmitter coil to the coil testing station.

55. (New) The method of testing of claim 55, further comprising:

retrieving data corresponding to the sensed type of the cable and the coil.